

## CLAIMS

1. A machine for bunching plant stems, which machine is provided with  
- a supply mechanism having a pair of rollers, which rollers are arranged  
rotatably about mutually parallel rotary shafts, so that surfaces of  
revolution of the rollers at least substantially touch each other, and  
5 - a receiving mechanism with a flexible band for receiving plant stems which  
upon rotation of the rollers are carried along between the rollers,  
characterized in that the receiving mechanism includes a gripper movable  
relative to the rollers, having a pair of fingers capable of gripping together,  
while at least a part of the flexible band is tensioned between the fingers.
- 10 2. A machine according to claim 1, wherein ends of the band are secured  
on the gripper, so that the rotary shafts of the rollers are situated outside a  
space that is embraced by fingers and the part of the band that is tensioned  
between the fingers.
3. A machine according to any one of the preceding claims, provided  
15 with a pair of lips resiliently pressing substantially against each other at a  
location on the discharge side of a plane through the rotary shafts of the  
rollers, placed such that stems that have been supplied by the rollers, after  
having been pressed between the lips by the rollers, are pushed away from  
the rollers by the lips.
- 20 4. A machine according to any one of the preceding claims, wherein the  
gripper is provided with an upholder with a point of connection that is  
connected to a part of the band between the fingers, the upholder being so  
arranged as to allow a movement of the point of connection in a direction  
from an opening between the fingers, the movement being limited to  
25 movement in a plane through both fingers.
5. A machine according to any one of the preceding claims, wherein the  
gripper includes a further pair of fingers between which a further flexible

band is tensioned, parallel to the fingers mentioned earlier, with a space between the pair of fingers and the further pair of fingers for receiving the rollers.

6. A machine according to any one of the preceding claims, with a  
5 movement mechanism for moving the gripper and the rollers relative to each other between a receiving position and a tying position, in which receiving position the part of the band that is tensioned between the fingers is arranged on a discharge side of the plane through the rotary shafts of the rollers, so that stems carried along by the rollers are received with the band  
10 between the fingers, and in which tying position the fingers enclose the received stems with the band, while the stems, compared with the receiving position, are arranged further away from the rollers.

7. A machine according to any one of the preceding claims, wherein the gripper is provided with a gripping mechanism for bringing the ends of the  
15 fingers together.

8. A machine according to claim 7, provided with a stop which is coupled to a frame in which the rollers are mounted, and wherein at least one of the fingers is mounted rotatably on an arm, and wherein on this finger an engagement element is mounted for pushing the gripper open with the stop  
20 when the gripper is moved towards the rollers.

9. A gripper for a machine for bunching plant stems, which gripper is provided with a pair of fingers capable of mutually gripping together, wherein at least a part of a flexible band is tensioned between the fingers, for receiving stems which, passing between fingers, are pushed against the  
25 band.

10. A gripper according to claim 9, provided with a further pair of fingers capable of mutually gripping together, wherein at least a part of a further flexible band is tensioned between the fingers, wherein the pair of fingers and the further pair of fingers are included parallel to each other, with a  
30 space therebetween for receiving a pair of rollers in a non-gripping manner.

11. A gripper according to claim 9 or 10, provided with a pair of meshing gearwheels which are coupled to the fingers to transmit an opening push force from one finger to the other, and at least one spring element which is coupled to at least one of the fingers to move ends of the fingers towards  
5 each other when from outside the gripper no opening push force is exerted.
12. A gripper according to claim 9, 10 or 11, provided with an upholder having a point of connection which is connected to a part of the band between the fingers, the upholder being so arranged as to allow a movement of the point of connection in a direction from an opening between the  
10 fingers, the movement being limited to movement in a plane through both fingers.
13. A method for bunching plant stems, wherein the plant stems are carried along between a pair of rollers, and after being carried along by the rollers are received in a flexible band, characterized in that the flexible band  
15 is tensioned between fingers, capable of gripping together, of a gripper, which fingers, at reception, keep the band with an opening between the fingers on a discharge side of a plane through rotary shafts of the rollers, whereafter ends of the fingers are brought towards each other and the stems in the gripper are moved away from the rollers to be tied together.
- 20 14. A method according to claim 13, wherein the stems at reception are pushed with lips away from the rollers to the band after they have been carried along by the rollers.